

when he speaks of the origin of a recessive Mendelian variety as a bud sport. The hypothesis of incomplete triple fusion is in a way a compromise between the inapplicable and discarded older hypotheses involving entire suppression of the triple fusion and the later ones involving no gross cytological aberrations whatever. Although heartily in accord with EMERSON'S well-considered views in regard to somatic mutation in general, the reviewer must confess to a distrust of drawing a close parallel between bud sports and anomalous endosperm development.—H. H. BARTLETT.

Tubers of *Nephrolepis*.—SAHNI¹⁶ has investigated the vascular anatomy of the tubers borne on the underground stolons of *Nephrolepis*, and has uncovered a very interesting situation. The vascular strand of the stolon penetrates the base of the tuber as a protostele for a short distance, and then expands into a funnel, acquiring in succession internal phloem, pericycle, endodermis, and "ground tissue." Later the funnel-like stele breaks up, at the same time expanding enormously, into a hollow network of ribbon-like strands (each concentric in structure) inclosing gaps of irregular shape and size. These strands converge again into a single protostelic strand, which usually ends in the apical "mamelon." Root strands arise promiscuously from this reticulate stele. SAHNI calls attention to the fact that the conspicuous gaps that appear in this latticed cylinder cannot be explained as leaf gaps, since there is no trace of leaves on the tuber. He suggests that it is a case of a solid stele dilated sufficiently to transform it into a hollow network. TANSLEY has suggested that it is the dilation of a protostele that converts it into a siphonostele.—J. M. C.

Soil Science.—Many will welcome the founding of the new journal *Soil Science*. It is published (first number January 1916) at Rutgers College, with JACOB G. LIPMAN as editor-in-chief, and NICHOLAS KOPELOFF and CARL R. WOODWARD as assistant editors, along with 23 consulting editors, representing experts in this line from various parts of the United States and from 9 foreign countries. The editor-in-chief outlines the scope of the journal in the following statement: "*Soil Science* is to be devoted to problems in soil physics, soil chemistry, and soil biology. Papers dealing with problems in plant physiology, agronomy, bacteriology, or geology will be accepted only when they may contribute directly to our knowledge of soil fertility." He feels that greater cooperation will be gained among American workers on soil problems by a common channel of publication, in contrast with the previous distribution of articles through a number of American and several foreign journals. Promptness of publication is also of great importance. No doubt this will bring a welcome if only a slight relief to overcrowded journals in a number of lines.—WILLIAM CROCKER.

¹⁶ SAHNI, BIRBAL, The vascular anatomy of the tubers of *Nephrolepis*. *New Phytol.* 15:72-80. *figs.* 3. 1916.